

CLAIMS

The invention is claimed as follows:

1. A catheter set for peritoneal dialysis comprising:
5 a catheter having first and second ends; and
an insert filling a majority of an interior space defined by the catheter, the
insert defining a cavity and having an extraperitoneal end and an intraperitoneal end.
2. The set of Claim 1, which includes a plug placed in the extraperitoneal
10 end of the insert after the catheter and insert have been implanted in a patient.
3. The set of Claim 1, wherein the intraperitoneal end of the insert is open
or closed.
- 15 4. The set of Claim 1, wherein the catheter and insert are packaged
together.
5. The set of Claim 1, which includes a guide placed in the cavity of the
insert before the catheter and insert have been implanted in the patient.
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6. The set of Claim 1, wherein at least one of the insert and the plug
includes a radio opaque member.
7. The set of Claim 1, wherein the insert is metal reinforced.
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8. The set of Claim 1, wherein the catheter is a tube and the insert fills
most of an open space defined by the tube.
9. The set of Claim 1, which includes a syringe for injecting a liquid into
30 the cavity.
10. The set of Claim 9, wherein the liquid is saline.

11. The set of Claim 1, wherein at least one of the catheter and the insert includes a tubular wall that defines at least one aperture.

12. The set of Claim 11, wherein the apertures are located at a different
5 section of the tubular wall of the catheter than are the apertures in the tubular wall of the insert.

13. The set of Claim 11, wherein at least one aperture is an elongated flute.

10 14. The set of Claim 1, wherein the insert is at least as long as the catheter.

15. The set of Claim 1, which includes at least one piece of surgical string securing the catheter and the insert.

15 16. A catheter set for peritoneal dialysis comprising:
a catheter having first and second open ends;
an insert placed inside the catheter, the insert defining a cavity and having an
extraperitoneal end and an intraperitoneal end; and
a guide placed in the cavity and extending from the extraperitoneal end of the
20 insert.

17. The catheter set of Claim 16, wherein the guide is metal.

18. The catheter set of Claim 16, which includes a trocar secured to the
25 extraperitoneal end of the insert when the guide has been removed.

19. The catheter set of Claim 16, wherein the guide defines a portion
configured and arranged to be grasped and moved by a person.

30 20. The catheter set of Claim 16, wherein the catheter includes at least one
cuff.

21. The catheter set of Claim 20, wherein the cuff includes at least one of a bead and a flange.

22. The catheter set of Claim 16, wherein a portion of the catheter and
5 insert is coiled.

23. An obstructor for occupying space within a tubular catheter when inserted into a patient, the catheter defining first and second ends, the obstructor comprising:

10 a tube including an extraperitoneal end and an intraperitoneal end, the extraperitoneal end including a portion having an increased diameter, the portion contacting the first end of the catheter when the tube is inserted into the catheter, the intraperitoneal end of the tube extending at least substantially to the second end of the catheter, an outer diameter of the tube filling substantially an interior space defined by
15 the tubular catheter.

24. The obstructor of Claim 23, wherein the larger diameter portion is sized to press-fit inside the catheter.

20 25. The obstructor of Claim 23, wherein the tube houses a radio opaque member.

26. The obstructor of Claim 23, wherein the tube is a first tube and the larger diameter portion is a second tube adhered to the first tube.

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27. The obstructor of Claim 23, wherein the tube is made from at least one material selected from the group consisting of: silicone, teflon, polyurethane, polypropylene, metal mesh, metal spiral, and any combination thereof.

30 28. The obstructor of Claim 23, wherein the tube defines at least one aperture along its length that allows fluid injected into the extraperitoneal end to exit the tube.

29. The obstructor of Claim 23, which includes a plug inserted into the extraperitoneal end.

30. The obstructor of Claim 29, wherein the plug is made from at least one
5 material selected from the group consisting of: silicone, teflon, polyurethane, polypropylene, metal and any combination thereof.

31. A method for inserting a catheter comprising the steps of:
making an incision into a patient;
10 inserting the catheter, the catheter having an insert filling most of the internal space defined by the catheter; and
removing the insert after the catheter has been implanted.

32. The method of Claim 31, wherein a guide is placed initially into the
15 insert; and which includes the steps of using the guide to maneuver the catheter inside the patient and then removing the guide.

33. The method of Claim 31, wherein the insert includes a tubular length and at least one hole defined by the tubular length, and which includes the step of
20 injecting fluid into the tubular length, through the hole between the insert and the catheter.

34. The method of Claim 33, which includes the step of placing a plug in the insert after injecting the fluid into the insert.
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35. The method of Claim 33, which includes the step of removing the insert after injecting the fluid.

36. The method of Claim 31, wherein at least one cuff is positioned on the
30 catheter, and which includes the step of securing the cuff to the patient.

37. The method of Claim 31, which includes making a plurality of incisions

into the patient and the step of using the multiple incisions to guide the catheter in a plurality of directions.

38. The method of Claim 37, which includes the step of using an instrument
5 to bend the catheter inside the patient.

39. The method of Claim 31, which includes the step before removing the insert of closing the insertion with the catheter and insert implanted inside the patient.

10 40. The method of Claim 31, wherein removing the insert occurs after a period of time in which the insert and catheter have resided inside the patient.

41. The method of Claim 31, which includes the step of flushing the catheter after the insert has been removed.

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42. The method of Claim 31, which includes the step of securing one end of the catheter to reside outside the body of the patient after the insert has been removed.

43. The method of Claim 31, wherein the catheter is preformed to have a
20 bend, wherein inserting the catheter includes inserting the preformed catheter.

44. A method of implanting a catheter comprising the steps of:
implanting the catheter inside a patient, the catheter having an obstruction
tending to disallow material from entering the catheter;
25 leaving the entire catheter inside the patient for a period of time; and
removing the obstruction and securing a portion of the catheter to extend
outside the patient.